REMARKS

The Decision on Appeal dated September 29, 2010, and the final Office Action dated July 10, 2007, have been received and carefully noted. The above amendments to the claims, the following remarks, and the enclosed Request for Continued Examination (RCE), are submitted as a full and complete response thereto.

By this Response, claims 1, 16, 22-24, 26, and 28-30 have been amended to more particularly point out and distinctly claim the subject matter of the present invention. New claims 37 and 38 have been added. Claim 2 has been canceled without prejudice or disclaimer. No new matter is believed to have been added. Support for the above amendments is provided at least on pages 5 and 9 of the Specification. Accordingly, claims 1, 3-30, and 37-38 are currently pending in the application and are respectfully submitted for consideration.

In view of the above amendments and the following remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections to the claims for the reasons discussed below.

The final Office Action of July 10, 2007 rejected claims 1, 2, 7-17, 21-23, and 25-30 under 35 USC §102(e) as being anticipated by U.S. Publication No. 2004/0228320 of Laroia *et al.* ("Laroia"). Applicants respectfully submit that the present claims recite subject matter which is neither disclosed nor suggested by the cited prior art.

As will be discussed below, Laroia fails to disclose or suggest all of the elements of any of the presently pending claims.

Laroia describes a repeat request method and apparatus in which different NAK signals are used to indicate different relative levels of success in regard to an unsuccessful attempt to decode a received signal. An ACK signal is used in the case of successful decoding. FIG. 5 illustrates an example of using incremental redundant codes, e.g., incremental redundant LDPC codes, in accordance with the invention. As shown in FIG. 5 of Laroia, in a first traffic segment 520, the information bits 510 and the first part of the parity check bits 514 are transmitted. See paragraphs [0078]-[0080]. The combination of the coded information bits 510 and the first part 514 of the parity check bits form a first set of encoded information which is transmitted. The remaining parity check bits, the second through fourth parity check bits, form a set of redundant information, which is stored and used in the event of a NAK.

Applicants respectfully submit that Laroia fails to disclose or suggest all of the elements of the present claims. For example, Laroia does not disclose or suggest, at least, "providing a set of predetermined sequences of redundancy parameters to a terminal device, said redundancy parameters each indicating a redundancy version for an automatic repeat request processing at the terminal device," and "wherein said information comprises at least one of an index and a pointer to said selected at least one sequence," as recited in claim 1 and similarly recited in claims 16, 23, and 28-30.

According to embodiments of the claimed invention, the index or pointer transmitted to the terminal device specifies a selected at least one sequence of RVs, while each redundancy parameter indicates a RV. Thus, a sequence of RVs is

transmitted with a single information. Accordingly, sequences of RVs are defined and the selection of at least one sequence is done at the receiver side and the transmitter side uses the selected sequence of RVs. This provides the advantage that signaling load can be reduced, since the claimed selection scheme requires less signaling between the network and the terminal device. Only one information (index or pointer) indicating the selected sequence of RVs is transmitted between the network and the terminal device.

Laroia does not disclose or suggest all of the elements of the independent claims and, therefore, does not provide the advantages and features discussed above. Rather, Laroia provides that if the receiver 522 with its decoder 524 cannot decode the information bits 510 and sends a NAK 526, the transmitter 502 sends the second part of the parity check bits 516 in a second traffic segment 528. The receiver 522 uses both the received segments 520, 528 in the decoding process in an attempt to decode the information bits 510. If the receiver 522 still cannot decode the information bits 510 as evidenced by the receiving device 522 sending another NAK 530 in an acknowledgement segment corresponding to the second traffic segment 528. Then, the transmitter 502 transmits the third part of the parity check bits 518 in a third traffic segment 532. The receiver 522 should use some or all of the received segments, e.g., segments 520, 528, 532 to decode the information bits 510. If the receiver 522 decodes the information bits 510 successfully at some time, then the transmitter may discard the unused parity check bits.

Laroia, however, does not disclose or suggest that each of the redundancy parameters indicate a redundancy version for an automatic repeat request processing at the terminal device, or that the information transmitted to the terminal device comprises an index or a pointer to the selected at least one sequence. Instead, Laroia provides a successive transmission of redundancy parameters until reaching a successful decoding. Laroia appears to provide a block of redundant bits 512 including a first part 514, a second part 516, a third part 518, and a fourth part 519. The first part of the parity check bits 514 is transmitted in combination with the information bits 510. Then, each remaining part of the parity check bits is successively transmitted in the event of a NAK whenever the receiver 522 is unable to decode the information bits 510 associated with the transmitted parity check bits.

Therefore, the essence of the description of Laroia is to achieve an efficient automatic repeat request in a multiple access wireless communications system by providing a large block of parity check bits 512 associated with the big parity check matrix used by the transmitter (See Laroia, page 9, lines 8-10).

According to embodiments of the claimed invention, on the other hand, each redundancy parameter indicates a RV and the claimed information is a single information which indicates the selected sequence of RVs. Laroia does not provide any disclosure of a specific sequence of RVs being selected and a single information which indicates the selected sequence being transmitted.

Therefore, Laroia fails to disclose or suggest, at least, "providing a set of predetermined sequences of redundancy parameters to a terminal device, said redundancy parameters each indicating a redundancy version for an automatic repeat request processing at the terminal device," and "wherein said information comprises at least one of an index and a pointer to said selected at least one sequence," as recited in claim 1 and similarly recited in claims 16, 23, and 28-30. It is respectfully requested that independent claims 1, 16, 23, and 28-30 and the claims dependent thereon be allowed.

The Office Action also rejected claims 3-6, 18-20, and 24 were rejected under 35 USC §103(a) as being obvious over Laroia in view of Applicants' allegedly admitted prior art ("AAPA"). Applicants respectfully submit that the present claims recite subject matter which is neither disclosed nor suggested by the cited prior art.

Laroia is discussed above. AAPA generally describes uplink packet data of Wideband Code Division Multiple Access (WCDMA) systems covering radio transmission of data from a mobile unit or mobile terminal, called User Equipment (UE) in third generation terminology, to a fixed station, called Node B in third generation terminology. Here, the case of erroneous reception of data packets is handled by Radio Link Control (RLC) signaling. See paragraph [0003]. However, AAPA further provides in paragraph [0003] that such configuration is disadvantageous in that a retransmission will require relatively large buffers and will introduce significant delays. One of the technologies under investigation in connection with enhanced uplink data is fast H-ARQ, where the packet retransmissions are handled at either physical layer or Media Access

Control (MAC) layer and, thus, in principle at the Node B instead of the Radio Network Controller (RNC).

Claims 3-6, 18-20, and 24 are dependent upon claims 1, 29, and 30, respectively. As discussed above, Laroia fails to disclose or suggest all of the elements of claims 1, 29, and 30. AAPA does not cure the deficiencies of Laroia because AAPA also fails to disclose or suggest, at least, "providing a set of predetermined sequences of redundancy parameters to a terminal device, said redundancy parameters each indicating a redundancy version for an automatic repeat request processing at the terminal device," and "wherein said information comprises at least one of an index and a pointer to said selected at least one sequence." Accordingly, the combination of Laroia and AAPA fails to disclose or suggest all of the elements of claims 3-6, 18-20, and 24. In addition, claims 3-6, 18-20, and 24 should be allowed for at least their dependence upon claims 1, 29, and 30, and for the specific limitations recited therein.

For at least the reasons discussed above, Applicants respectfully submit that the cited prior art fails to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1, 3-30, and 37-38 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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